

**REMARKS**

Favorable reconsideration of this application, in light of the preceding amendments and following remarks, is respectfully requested.

Claims 1, 2 and 11 are pending in this application. Claims 1 and 11 are amended and no claims have been added. Claims 3-10 are cancelled. Claims 1 and 11 are the independent claims.

**Example Embodiments of the Present Application**

A non-limiting example embodiment of the organometallic composition is explained in paragraph [0021] of the present specification. The sensitivity to light that is a characteristic of the organic ligand of Formula 1 allows the organic ligand to become readily dissociated from the central metal. In addition, the ternary organometallic composition comprising the organometallic compounds of Formula 2 and 3 need not be photosensitive and are mixed uniformly within the prescribed range in the composition.

**Rejections under 35 U.S.C. § 103**

Claims 1-2 and 11 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Japanese Patent No. 2001-221908 (Furuya) in view of U.S. Patent No. 6,184,403 (Welch et al., hereinafter referred to as Welch). Applicants respectfully traverse this rejection for the reasons detailed below.

Independent claims 1 and 11 recite “an organometallic composition comprising organometallic compound (I) of Formula 1 containing Ag and a neutral metallic ligand having photosensitivity, organometallic compound (II) of Formula 2 containing at least one of Au, Pd and Ru, and organometallic compound (III) of Formula 3 containing at least one of Ti, Ta, Cr, Mo, Ru, Ni, Pd, Cu, Au and Al”. Example non-limiting embodiments of this feature are

discussed throughout the instant specification. Furuya and/or Welch, as relied upon by the Examiner, fails to suggest an organometallic composition comprising organometallic compound (I) of Formula 1 containing Ag and a neutral metallic ligand having photosensitivity, organometallic compound (II) of Formula 2 containing at least one of Au, Pd and Ru, and organometallic compound (III) of Formula 3 containing at least one of Ti, Ta, Cr, Mo, Ru, Ni, Pd, Cu, Au and Al as recited in independent claims 1 and 11.

The outstanding Office Action on page 5, lines 10-16, acknowledges that Furuya fails to disclose “the organic compound is the claimed neutral ligand and the organic-metal complex includes the anion recited in independent claims 1 and 11” and relies on the teachings of Welch for these features of claims 1 and 11.

In addition to the above-identified deficiencies of Furuya, Applicants respectfully submit that Furuya does not disclose an organic metallic composition as the Examiner claims, but discloses only alloys produced as a film on a substrate by sputtering metals, which is different from the organometallic compound disclosed in independent claims 1 and 11. Also, the starting materials and process in Furuya are different from those disclosed in independent claims 1 and 11.

In addition, independent claims 1 and 11 disclose an organic ligand of Formula 1 that is photosensitive, which allows the ligand to become readily dissociated from the central metal. Furuya discloses a reflection film consisting of AgPdX, AgAuX, wherein X is Cu or Ti, and not an organometallic composition comprising the organometallic compounds in Formulas 1, 2 and 3 nor a photosensitive organic ligand as disclosed in independent claims 1 and 11.

In regards to Welch, on page 3 of the Office Action, the Examiner states that Welch includes a neutral metallic ligand such as NR<sup>9</sup>, wherein R<sup>9</sup> comprises an alkyl group, and a nitro

or carboxylate anion. Applicants respectfully submit that CVD precursors having increased volatility and chemical stability in Welch can be obtained by using a ligand L (compound of Formula III) that has Si, Ge or Sn and reduced oxygen, wherein NR<sup>9</sup> is not an essential element.

Furthermore, volatility of the ligand of independent claims 1 and 11 is due to photosensitivity, but Welch teaches volatility of CVD precursors including a neutral metallic ligand.

Because neither Furuya nor Welch teaches an organometallic composition comprising organometallic compound (I) of Formula 1 containing Ag and a neutral metallic ligand having photosensitivity, organometallic compound (II) of Formula 2 containing at least one of Au, Pd and Ru, and organometallic compound (III) of Formula 3 containing at least one of Ti, Ta, Cr, Mo, Ru, Ni, Pd, Cu, Au and Al as recited in independent claims 1 and 11, the alleged combination of Furuya and Welch also cannot teach “an organometallic composition comprising organometallic compound (I) of Formula 1 containing Ag and a neutral metallic ligand having photosensitivity, organometallic compound (II) of Formula 2 containing at least one of Au, Pd and Ru, and organometallic compound (III) of Formula 3 containing at least one of Ti, Ta, Cr, Mo, Ru, Ni, Pd, Cu, Au and Al” as recited in independent claims 1 and 11.

With respect to the proposed combination of Furuya and Welch, Applicants respectfully submit that the combination is improper for at least the following reasons.

Furuya is directed to a reflector (which is a technical field different from example embodiments), whereas the teachings of Welch describe MOCVD precursors. Accordingly, Applicants respectfully submit there is insufficient evidence in the record for modifying the reflector of Furuya to incorporate the MOCVD precursors of Welch. Additionally, neither

Furuya nor Welch recognize the solution thereto regarding the composition ratio of the organometallic compounds of Formula 1, 2 and 3.

Further, Applicants respectfully submit that an attempt to bring in the isolated teachings of the MOCVD precursors of Welch into the reflector of Furuya would amount to improperly picking and choosing from the different references without regard for the teachings of the references as a whole.<sup>1</sup>

The Applicants maintain, therefore, that the Action does not present the required "convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references," *Ex parte Clapp*, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985), and that this rejection may not be properly maintained absent such reasoning.

The Applicants, therefore, respectfully request that the rejection to Claims 1 and 11 under 35 U.S.C. § 103(a) be withdrawn.

Claim 2, dependent on independent claim 1, is patentable for the reasons stated above with respect to claim 1 as well as for its own merits.

Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection to independent claims 1 and 11 and all claims dependent thereon.

### **CONCLUSION**

In view of the above remarks and amendments, the Applicants respectfully submit that each of the pending objections and rejections has been addressed and overcome, placing the

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<sup>1</sup> See *In re Ehrreich* 590 F2d 902, 200 USPQ 504 (CCPA, 1979) (stating that patentability must be addressed "in terms of what would have been obvious to one of ordinary skill in the art at the time the invention was made in view of the sum of all the relevant teachings in the art, not in view of first one and then another of the isolated teachings in the art," and that one "must consider the entirety of the disclosure made by the references, and avoid combining them indiscriminately.")

present application in condition for allowance. A notice to that effect is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to contact the undersigned.

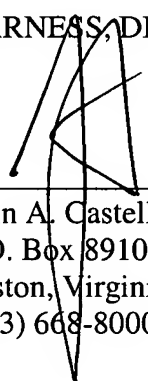
Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Erin G. Hoffman, Reg. No. 57,752, at the telephone number of the undersigned below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

HARNES, DICKEY, & PIERCE, P.L.C.

By



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John A. Castellano, Reg. No. 35,094  
P.O. Box 8910  
Reston, Virginia 20195  
(703) 668-8000

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